

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,597	07/30/2003	Beatrice Martin	Q76502	6211
23373 7 SUGHRUE MIC	7590 02/08/2007 ON. PLLC	EXAMINER		
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			IBRAHIM, MOHAMED	
			ART UNIT	PAPER NUMBER
			2144	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
Office Assists Occurrence	10/629,597	MARTIN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Mohamed Ibrahim	2144			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	I. lely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 30 Ju	lv 2003.				
·= · ·					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-21</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10)⊠ The drawing(s) filed on <u>30 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
 Certified copies of the priority documents have been received. 					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of	of the certified copies not receive	d.			
Attachment(s)					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) Interview Summary Paper No(s)/Mail Da				
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P				
Paper No(s)/Mail Date <u>11/07/2003</u> . 6) U Other:					

Art Unit: 2144

DETAILED ACTION

Specification

1. Claim 21 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 16. See MPEP § 608.01(n). Accordingly, the claim 21 not been further treated on the merits.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "instead of said node," it is not clear what node the Applicant is referring to in this case. Moreover, the use of the terminologies such as 'adapted to' simply states the intended use of the device and accordingly, no patentable weight is given to such intended use language.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Page 3

5. Claims 1-8 10-12, 14, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Torikka et al (Torikka), U. S. Patent No. 6937577.

Regarding claim 1, Torikka discloses a data management device for a communication installation including at least one base station having resources (see e.g. fig. 1 item 12. base station is shown) and at least one terrestrial node connected to a core network and to said base station to control its resources via an interface (see e.g. fig. 1 item 14; base station controller is shown) which device includes control means adapted to be coupled to a traffic source and to said interface and adapted to take local control, on command, of at least a portion of said resources of said base station, instead of said node, to enable transfer of data between said traffic source and said base station (see e.g. fig. 1, abstract, col. 4 lines 42-52, col. 3 lines 7-12 and col. 4 lines 57-67; the system comprises of a base station (BS) which is arranged to communicate via interface and controlled by a Base Station Controller (BSC) which enables data transfer between the MSC and base station).

Regarding claim 2, Torikka discloses wherein said control means include at least a portion of a stack of protocols dedicated to management of said resources so as (see e.g. fig. 7; device rack): to manage the configuration of at least one portion of at least one cell managed by said base station and the associated resources, to control at least one portion of the configuration of data transport channels managed by said base station (see e.g. col. 3 lines 3-6 and 13-20; configuring the functionality of at least one

61).

node by modifying the software in at least one board unit of said node), to manage "resource" events generated by said base station and representative of the status of its resources (see e.g. col. 2 lines 17-29 and col. 3 lines 51-63; allocating resources to a node within the network), and to check that identical configuration information is held by said base station and said node (see e.g. col. 5 line 66-col. 6 line 4 and col. 8 lines 47-

Regarding claim 3, Torikka discloses wherein said control means include at least said portion of said stack of protocols dedicated to managing synchronization of channels under the control of said base station (see e.g. col. 4 line 57-col. 5 line 3).

Regarding claim 4, Torikka discloses wherein said portions of said stack of protocols dedicated to resource management and synchronization are chosen from a group comprising at least a portion of the Node B Application Part protocol, at least a portion of the Radio Resource Control protocol, at least a portion of the Frame Protocol, at least a portion of the Radio Link Control protocol, at least a portion of the Medium Access Control protocol, at least a portion of the Packet Data Convergence protocol, and at least a portion of the Broadcast/Multicast Control protocol (see e.g. fig. 2, fig. 8 and col. 8 lines 13-22, 39-46; the system provides the use of Medium Access Control, Packet Data, Radio resources and Radio Link).

Regarding claim 5, Torikka discloses wherein said control means include a filter module

Art Unit: 2144

adapted to filter said traffic from said traffic source and said traffic from said node (see e.g. col. 8 lines 25-26; system provides the use of ALT board to prioritize the traffic).

Regarding claim 6, Torikka discloses wherein said control means are adapted: to send said base station a resource reservation request on receipt of a request to transmit traffic to at least one user equipment situated in a cell managed by said base station and coming from said traffic source, to send said node a message indicating that said available resources are blocked on receipt of a response message generated by said base station indicating availability of resources, and to send a message to said base station to release said resources that have been used and a message to said node to tell it that said resources have been unblocked when said traffic from said traffic source is finished (see e.g. figs. 3,4 and 10, col. 1 line 63-col. 2 line 3, col. 3 lines 51-62, col. 47-65 and col. 10 lines 6-26; the system enables the send and receive of data from a node in the telecommunication network to the base station, via interface. The base station controller serves as the means and management device that enables the BS to send its resources to requesting node in the telecommunication).

Regarding claim 7, Torikka discloses wherein said control means include a message generator module adapted to send said node said messages indicating that resources have been blocked (see e.g. fig. 7 and col. 3 lines 21-32).

Regarding claim 8, Torikka discloses. The device claimed in claim 3 wherein, in an

Art Unit: 2144

installation including means adapted to transmit data from said traffic source by radio, at first and second frequencies, respectively to user equipments situated in a cell managed by said base station and to said base station (see e.g. col. 2 line 65-col. 3 line 6; installation and modification of resources), said control means are adapted to calculate a transmission difference representative of the difference between the transmission times of said data at said first and second frequencies and to delay the data received and to be transmitted to said base station by an amount substantially equal to the calculated difference (see e.g. fig. 1 an col. 4 line 57-col. 5 line 8).

Regarding claim 10, Torikka discloses wherein said control means include a synchronization adaptor module adapted to calculate said transmission time differences between traffic from said traffic source and from said node (see e.g. col. 5 lines 47-65).

Regarding claim 11, Torikka discloses further including a module provided with a connection interface (see e.g. col. 3 lines 21-27; connection to ATM interface).

Regarding claim 12, Torikka discloses wherein said module is adapted to be connected to said base station via said connection interface (see e.g. col. 4 lines 57-62).

Regarding claim 14, Torikka discloses. The device claimed in claim 1, adapted to be installed in said base station (see e.g. col. 3 lines 3-6 and col. 7 lines 61-67).

Art Unit: 2144

Regarding claim 16, Torikka discloses a communication installation including at least one base station having resources and at least one terrestrial node connected to a first core network and to said base station to control its resources via an interface, which installation includes a device as claimed in any preceding claim (see e.g. col. 1 lines 22-36).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 9,13, 15, 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torikka in view of Karabinis, U. S. Patent No. 6856787.

Regarding claim 20, Torikka discloses the invention substantially as claimed. However Torikka does not explicitly discloses wherein said satellite access network includes at least one satellite gateway connected to a satellite node connected to a second core network and together therewith constituting said traffic source, at least one satellite terminal connected to one of said base stations and to said node, and at least one

Art Unit: 2144

communication satellite adapted to exchange data by radio with said satellite gateway, with said satellite terminal, and with user equipments adapted to exchange data with said base station via said resources.

Karabinis teaches wherein said satellite access network includes at least one satellite gateway connected to a satellite node connected to a second core network and together therewith constituting said traffic source (see e.g. fig. 2, col. 2 lines 13-28 and col. 4 lines 11-20), at least one satellite terminal connected to one of said base stations and to said node (see e.g. col. 4 lines 18-25), and at least one communication satellite adapted to exchange data by radio with said satellite gateway (see e.g. col. 4 lines 26-45), with said satellite terminal, and with user equipments adapted to exchange data with said base station via said resources (see e.g. col. 4 lines 46-65). At the time of the invention, it would have been obvious to include a satellite communication to the system of Torikka. Motivation for doing so would have been to widen the coverage area while enhancing reliability of virtually unaffected transmissions.

Regarding claim 9, Torikka-Karabinis disclose wherein said difference is a function of the dimensions of the coverage area of said satellite transmission means and/or said base station (see e.g. col. 7 line 62-col. 8 line 4). The same motivation utilized in the combination of claim 20, equally applies as well to claim 9.

Regarding claim 13, Torikka-Karabini disclose wherein said module is adapted to be connected via said connection interface to a satellite terminal coupled to said base

station and to a satellite supplied by said traffic source (see e.g. col. 1 lines23-29). The same motivation utilized in the combination of claim 20, equally applies as well to claim 13.

Page 9

Regarding claim 15, Torikka-Karabini disclose adapted to be installed in a satellite terminal coupled to said base station and to a satellite supplied by said traffic source (see e.g. col. 3 lines 3-6). The same motivation utilized in the combination of claim 20, equally applies as well to claim 15.

Regarding claim 17, Torikka-Karabini discloses further including a satellite access network (see e.g. col. 1 line 42-43). The same motivation utilized in the combination of claim 20, equally applies as well to claim 17.

Regarding claim 18, the limitation of this claim has already been addressed (see claim 20 above).

Regarding claim 19, the limitations of this claim have already been addressed (see claim 20 above).

Regarding claim 21, Torikka-Karabini disclose use of a device and an installation each node being a radio network controller and each base station being a Node B (see e.g.

Art Unit: 2144

col. 1 lines 20-31). The same motivation utilized in the combination of claim 20, equally applies as well to claim 21.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Ibrahim whose telephone number is 571-270-1132. The examiner can normally be reached on Monday through Friday from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2144

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MIMI

WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100